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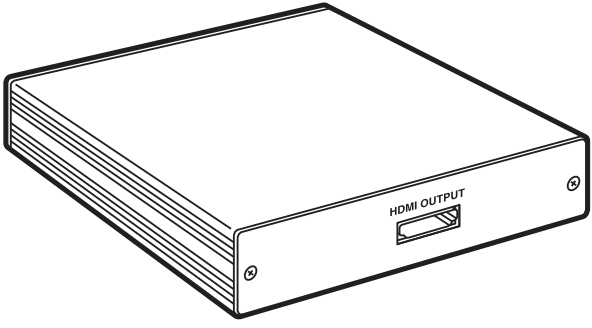
1000 Park Drive • Lawrence, PA 15055-1018 • 724-746-5500 • Fax 724-746-0746

BLACK BOX®
NETWORK SERVICES

JUNE 2008
AC561A-50
AC561A-150
AC561A-250

HDMI Receiver—50 m, 150 m, and 250 m



CUSTOMER SUPPORT INFORMATION

Order **toll-free** in the U.S.: Call **877-877-BBOX** (outside U.S. call **724-746-5500**)
FREE technical support 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**
Mailing address: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018
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FEDERAL COMMUNICATIONS COMMISSION AND INDUSTRY CANADA RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

NORMAS OFICIALES MEXICANAS (NOM)
ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.

10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

12. Precaución debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.

13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.

14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.

15. En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.

16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.

17. Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.

18. Servicio por personal calificado deberá ser provisto cuando:

    A: El cable de poder o el contacto ha sido dañado; u

    B: Objectos han caído o líquido ha sido derramado dentro del aparato; o

    C: El aparato ha sido expuesto a la lluvia; o

    D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o

    E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS USED IN THIS MANUAL

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1. Specifications

Resolution: HDMI: 480i/480p, 576i/576p, 720p @ 50/60 Hz; 1080i @ 50/60 Hz, 1080p @ 50/60 Hz

User Controls: AC561A-150: (1) Equalizer switch, (1) Gain switch;
AC561A-250: (1) Equalizer switch, (1) Gain switch, (1) DIP switch

Connectors: Input: (1) RJ-45 CAT5 output for video, (1) RJ-45 CAT5 output for DDC;
Output: (1) HDMI female;
Power: (1) power connector

Power: 5 V/2.6 A DC power supply

Size: 1.2"H x 4.8"W x 4.9"D (3 x 12.3 x 12.5 cm)

Weight: 1.5 lb. (0.7 kg)

2. Overview

2.1 Introduction

The HDMI Receivers (AC561A-50, AC561A-150, and AC561A-250) work with the HDMI Transmitter (AC560A). The HDMI over CAT5 transmitter can extend an HDMI signal through CAT5 cables for a distance of up to 50, 150, or 250 meters, depending on the receiver you choose. Installing the system is quick and easy: Simply place the receiver unit next to your display and the transmitter next to your HDTV source (such as a DVD player). Connect the required cables, as described in Chapter 3.

2.2 Features

- Complies with HDMI 1.2, HDCP 1.1, and DVI 1.0 specifications.
- Supports various types of CAT5/CAT5e/CAT6 cables.
- Supports high-definition input up to 1080p. Output resolution follows input.
- Easy to install and simple to operate.

2.3 What's Included

- HDMI Receiver (AC561A-50, AC561A-150, AC561A-250)
- 5-VDC power adapter
- (4) power clips for US, Europe, UK, and Australia
- This user's manual

2.4 Components

The receiver's front panel includes an HDMI output connector. All three of the AC561A models' rear panels have a DDC input connector, a video input connector, and a power connector. The AC561A-150's and AC561A-250's rear panels also have an equalizer switch and a gain switch. The AC561A-250 also has a DIP switch.

See **Chapter 3** for illustrations and component locations.

3. Installation and Operation

3.1 Front Panel

Figure 3-1 shows the components on the Receiver's front panel. Table 3-1 describes the components' functions.

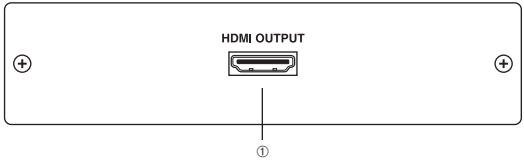

Figure 3-1. Receiver front panel.

Table 3-1. Receiver front-panel components and their functions.

Number	Component Name	Description
①	HDMI output	Connect the HDMI output port to the HDMI input of your display.

3.2 Rear Panel

Figures 3-2 through 3-4 show the components on the Receivers' rear panels. Table 3-2 describes the components' functions.

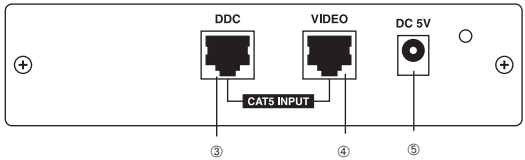

Figure 3-2. AC561A-50 receiver rear panel.

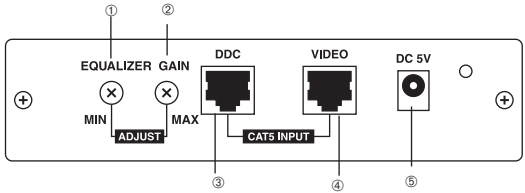

Figure 3-3. AC561A-150 receiver rear panel.

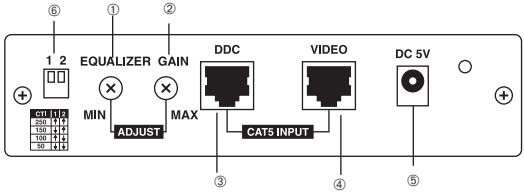

Figure 3-4. AC561A-250 receiver rear panel.

Table 3-2. Receiver rear-panel components and their functions.

Number	Component Name	Description
①	*Equalizer (AC561A-150 and AC561A-250 models only)	Use this switch to adjust signal enhancement over long distance. *NOTE: (Figure 3-2 shows the AC561A-50 model; ① and ② are not present.)
②	*Gain (AC561A-150 and AC561A-250 models only)	Use this switch to adjust brightness. *NOTE: (Figure 3-2 shows the AC561A-50 model; ① and ② are not present.)
③	DDC input	Using CAT5/CAT5e/CAT6 cable, connect the DDC input to the transmitter's DDC output. NOTE: For advanced users only, if the DDC or HDCP data are required for the source and the display, you can use a single CAT5 cable to connect the transmitter's and the receiver's video ports.

Table 3-2 (continued). Receiver rear-panel components and their functions.

Number	Component Name	Description
④	Video input	Using CAT5/CAT5e/CAT6 cable, connect the video input to the transmitter's video output.
⑤	Power	Plug the 5-VDC power supply into the receiver and connect the adapter to an AC wall outlet.
⑥	**DIP switch (AC561A-250 model only)	***Selects cable length: 50, 100, 150, or 250 m **NOTE: (Figures 3-2 and 3-3 show the AC561A-50 and AC561A-150 models; ⑥ is not present.)

Table 3-3. DIP switch settings for the AC561A-250.

Length (meters)	DIP Switch #1	DIP Switch #2
250	UP	UP
150	DOWN	UP
100	UP	DOWN
50	DOWN	DOWN

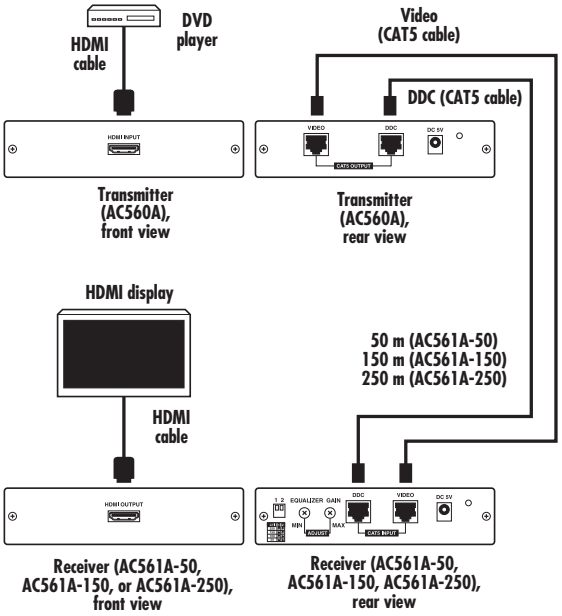

Figure 3-5. Typical installation.